

IN THE CLAIMS:

Please amend the claims as follows:

1. **(Currently Amended)** A heater and air-conditioning assembly for a vehicle comprising;

 a compressor **(12)** for compressing a refrigerant,

 a front end condenser **(14)** in fluid communication with said compressor for condensing fluid from said compressor **(12)**,

 a chiller-condenser **(16)** disposed downstream of and in fluid communication with said condenser **(14)**,

 a chiller-evaporator **(18)** disposed downstream of and in fluid communication with said chiller-condenser **(16)**,

 a main three-way valve **(20)** disposed in fluid communication with and between said compressor **(12)** and said condenser **(14)** for directing flow from said compressor **(12)** to said condenser **(14)** in an air-conditioning mode and for directing flow from said compressor **(12)** through a by-pass line **(22)** to said chiller-condenser **(16)** in a heat pump mode,

 an air-conditioning expansion device **(28)** disposed downstream of said front end condenser **(14)** and upstream of said by-pass line **(22)** for expanding the refrigerant in the air-conditioning mode,

 a heat pump expansion device **(24)** for expanding and exchanging heat with the refrigerant in said heat pump mode, and

an by-pass valve (26) disposed in parallel fluid communication between said chiller-condenser (16) and said chiller-evaporator (18) for directing serial fluid flow directly from said chiller-condenser (16) to said ~~[[chiller-condenser]]~~ chiller-evaporator (18) in said air conditioning mode and for alternatively by-passing the ~~[[entire]]~~ serial flow directly from said chiller-condenser (16) to said chiller-evaporator to a by-pass and parallel fluid flow from said chiller-condenser through said heat pump expansion device (24) and then to said chiller-evaporator (18) in said heat pump mode.

Claim 2. **(Cancelled)**

3. **(Previously Presented)** An assembly as set forth in claim 1 including a return line (30) from said chiller-evaporator (18) to said compressor (12).

4. **(Original)** An assembly as set forth in claim 3 including an accumulator-dehydrator (32) in said return line (30).

5. **(Previously Presented)** An assembly as set forth in claim 1 including a cabin heat exchanger (36), a coolant feed line (34) for conducting coolant flow from said chiller-condenser (16) to said cabin heat exchanger (36), a coolant exit line (38) for conducting coolant from said cabin heat exchanger (36) to said chiller-evaporator (18), and an interconnect line (40) for conducting coolant from said chiller-evaporator (18) to said chiller-condenser (16).

6. **(Original)** An assembly as set forth in claim 5 including a circuit pump (42) in said feed line for pumping coolant from said chiller-condenser (16) to said cabin heat exchanger (36).

7. **(Previously Presented)** A heater and air-conditioning assembly for a vehicle comprising;

a compressor (12) for compressing a refrigerant,

a front end condenser (14) in fluid communication with said compressor for condensing fluid from said compressor (12),

a chiller-condenser (16) disposed downstream of and in fluid communication with said condenser (14),

a chiller-evaporator (18) disposed downstream of and in fluid communication with said chiller-condenser (16),

a main three-way valve (20) disposed between said compressor (12) and said condenser (14) for directing flow from said compressor (12) to said condenser (14) in an air-conditioning mode and for directing flow from said compressor (12) through a by-pass line (22) to said chiller-condenser (16) in a heat pump mode,

a heat pump expansion device (24) for expanding and exchanging heat with the refrigerant in said heat pump mode, and

an by-pass valve (26) disposed between said chiller-condenser (16) and said chiller-evaporator (18) for directing flow from said chiller-condenser (16) through said heat pump expansion device (24) and to said chiller-evaporator (18) in said heat pump mode,

a cabin heat exchanger (36),

a coolant feed line (34) for conducting coolant flow from said chiller-condenser (16) to said cabin heat exchanger (36),

a coolant exit line (38) for conducting coolant from said cabin heat exchanger (36) to said chiller-evaporator (18),

an interconnect line (40) for conducting coolant from said chiller-evaporator (18) to said chiller-condenser (16), and

a coolant three-way valve (44) in said exit line (38) for directing coolant from said cabin heat exchanger (36) to an engine coolant circuit in said heat pump mode.

8 **(Previously Presented)** A heater and air-conditioning assembly for a vehicle comprising;

a compressor (12) for compressing a refrigerant,

a front end condenser (14) in fluid communication with said compressor for condensing fluid from said compressor (12),

a chiller-condenser (16) disposed downstream of and in fluid communication with said condenser (14),

a chiller-evaporator (18) disposed downstream of and in fluid communication with said chiller-condenser (16),

a main three-way valve (20) disposed between said compressor (12) and said condenser (14) for directing flow from said compressor (12) to said condenser (14) in an air-conditioning mode and for directing flow from said compressor (12) through a by-pass line (22) to said chiller-condenser (16) in a heat pump mode,

a heat pump expansion device (24) for expanding and exchanging heat with the refrigerant in said heat pump mode, and

an by-pass valve (26) disposed between said chiller-condenser (16) and said chiller-evaporator (18) for directing flow from said chiller-condenser (16) through said heat pump expansion device (24) and to said chiller-evaporator (18) in said heat pump mode,

a cabin heat exchanger (36),

a coolant feed line (34) for conducting coolant flow from said chiller-condenser (16) to said cabin heat exchanger (36),

a coolant exit line (38) for conducting coolant from said cabin heat exchanger (36) to said chiller-evaporator (18),

an interconnect line (40) for conducting coolant from said chiller-evaporator (18) to said chiller-condenser (16), and

a coolant three-way valve (44) in said exit line (38) for directing coolant from said cabin heat exchanger (36) to said chiller-evaporator (18) and chiller-condenser (16) in said air conditioning mode.

9. **(Original)** An assembly as set forth in claim 8 including a heater (46) in said coolant circuit, an engine pump (48) in said coolant circuit for pumping coolant through an engine (50) and said heater (46).

10. **(Original)** An assembly as set forth in claim 9 including a radiator (52), a thermostat (54) in said coolant circuit for selectively directing coolant in said coolant circuit through said heater (46) and said radiator (52) and said chiller-evaporator (18).

11. **(Original)** An assembly as set forth in claim 10 including an air-conditioning expansion device (28) disposed downstream of said condenser (14) and upstream of said by-pass line (22) for expanding the refrigerant in the air-conditioning mode, a return line (30) from said chiller-evaporator (18) to said compressor (12), an accumulator-dehydrator (32) in said return line (30), and a circuit pump (42) in said feed line for pumping coolant from said chiller-condenser (16) to said cabin heat exchanger (36).